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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,091	12/05/2001	Frederic Nigon	TRW(F)5992	8576

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EXAMINER

JENKINS, JERMAINE L

ART UNIT PAPER NUMBER

2855

DATE MAILED: 06/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/005,091

Applicant(s)

NIGON ET AL.

Examiner

Jermaine Jenkins

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-- The MAILING DATE of this communication appears n the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 13-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 21 & 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 21 & 33 are unclear. What is the memory device identifying?

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 32 & 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Karbo et al (4,160,234).

Referring to claim 32, Karbo et al teaches a tire conditioning system comprising an annular supported run-flat insert (26) supported by the wheel rim (22) having a transducer (50) providing a signal indicative thereof (Column 3, lines 48-66; Column 4, lines 8-10, See Figures 2-4).

Referring to claim 34, Karbo et al clearly illustrates in Figure 3 the annular support (26) insulating the antenna (28) from the wheel rim (22) (See Figures 2 & 3).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13-15, 17-20, 23, 24, 26 & 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mock et al (6,062,072) in view of Fiorletta (5,289,160).

In regards to claims 13, 26, 28, 30 & 31, Mock et al teaches an air pressure monitoring device comprising detectors (S1-S4) having a piezoelectric-type pressure sensor for each associated tire (R1-R4) (Column 4, lines 59-64), respective receivers (E1-E4) conveying associated signals to a central processing unit (Z) with each receiver having an antenna (Column 5, line 18-21), a coil of the receiving antenna being wound around the tire (Column 6, line 1, See Figures 2-4), and an antenna being insulated within the tire by using electrically insulated wire (Column 5, lines 40-41). However, Mock et al does not specifically teach a fixed antenna arranged near a tire.

Fiorletta teaches the mounting of a second antenna (603) within a housing placed near the associated wheel (Column 8, lines 57-61, See Figure 6). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide another fixed antenna to the receiver/transmitter as shown by Fiorletta in the apparatus of Mock et al for the

purpose of maintaining an accurate determination of the generated signals from any type sensor apparatus to a processing unit.

With respect to claims 14, 15, 17-20 & 29, Mock et al teaches the integration of the antenna (21) within the tire (20) with the antenna (21) being wound around the axis of the tire (20) (Column 5, lines 36-41; Column 11, lines 8-15, See Figures 2-4).

With respect to claims 23 & 24, in combination Mock et al and Fiorletta teaches the claimed invention except for the wheel rim being made of one of a non-conductive material and a weakly conductive material. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a wheel rim that is non-conductive or semi-conductive for the sole purpose of isolating any electrical interferences of the wheel rim from the antenna.

3. Claims 16, 22 & 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mock et al (6,062,072) in view of Fiorletta (5,289,160) as applied to claims 13-15, 17-20, 23, 24 & 26 above, and further in view of Karbo et al (4,160,234).

In regards to claims 16, 22 & 27, Mock et al and Fiorletta teaches the claimed invention except for the parameter sensor and the detector antenna of the detector being fixed on an annular support for running flat carried by the wheel rim, and the detector having a tuning circuit having an inductor and a capacitor, a rectifier and a circuit with at least one power storage capacitor, as well as a status device which receives output signals of the parameter sensor and supplies a modulating signal to an impedance modulation circuit of the detector antenna.

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Karbo et al teaches a tire conditioning system comprising an annular supported run-flat insert (26) having a transducer (50) and a circuitry (46) that has a rectifier (52), a charge storage release circuit (54), a modulator (56), a transmitter (58) with an antenna (28) (Column 3, lines 48-66; Column 4, lines 8-10 & 66-68, See Figures 2-4). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a run-flat system for the purpose of displaying tire measurement values to the operator of the vehicle while the wheel is riding in low pressure without being completely flat.

Allowable Subject Matter

4. Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermaine Jenkins whose telephone number is 703-305-3839. The examiner can normally be reached on Monday-Friday 8am-430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 703-305-4816. The fax phone numbers for the organization where this application or proceeding is assigned are 703-306-7382 for regular communications and 703-305-3839 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-3431.

Jermaine Jenkins

A.U. 2855

JJ

June 13, 2003



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